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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/581,655	05/31/2006	Gunter Endres	212/890US	3938
23371	7590	02/02/2011	EXAMINER	
CROCKETT & CROCKETT, P.C.			GRABOWSKI, KYLE ROBERT	
26020 ACERO			ART UNIT	PAPER NUMBER
SUITE 200				3725
MISSION VIEJO, CA 92691			MAIL DATE	DELIVERY MODE
			02/02/2011	PAPER

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/581,655

Filing Date: May 31, 2006

Appellant(s): ENDRES ET AL.

For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed on 12/13/10 appealing from the Office action mailed 07/15/10.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The following is a list of claims that are rejected and pending in the application:

Claims 1-4, 6-15, and 19.

Claim 5 was cancelled and is erroneously referenced in the status of claims.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

US 3,802,101	Scantlin	04-1974
US 5,651,615	Hurier	07-1997

(9) Grounds of Rejection

Claims 1-4, and 6-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Scantlin (US 3,802,101).

In respect to claim 1 and 2, Scantlin discloses a security element comprising: a core sheet 8 (which may constitute a metal layer e.g. aluminum; Col. 7, 8-14), which therein is introduced identifiers 6 in the form of patterns; the metal layer 8 is disposed between translucent coating layers 10 and 12 having "sufficiently low transmissivity to obscure the coded regions [identifiers 6] of the core sheet 8 from view by the naked eye" (Col. 5, 66-67). Although Scantlin does not disclose a "watermark effect" while features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429,1431-32 (Fed. Cir. 1997). (MPEP 2114). The structure disclosed in Scantlin will perform this effect (see Abstract) (i.e. the "coded region" identifiers transmit more light than its surroundings causing a "positive" image, and upon reflection, reflect less than their surroundings). Furthermore, Scantlin does not disclose the coating layers 10 and 12 having a visible spectral range of less than 10% or more specifically less than 5% however the structure as disclosed is at least capable of performing this function (i.e. this visible spectral range depends on the amount and intensity of light, surrounding ambient light, etc.). Furthermore, because the transmissivity is positive and allows some

light as discussed above, the transmittance is *sufficient* for viewing the metal layer and identifiers in reflected light (i.e. the transmittance does not impede the difference in reflection between the coded hole regions and the core region). In respect to the amended subject matter, holes 6 are local transformations of the metal layer into transparent modifications (Fig. 3). Also, the "visible spectral range" only depends on the material and the materials thickness; as discussed below, Scantlin discloses the same exact material, without specifying thickness, however it is well known in the art that credit/debit cards (which the present invention and Scantlin both disclose) have a regulatory thickness of 30 mils, and a person of ordinary skill would glean this overall thickness from the disclosure (as this thickness is required within a tolerance for passing regulations).

In respect to claim 3, Scantlin discloses that the coating layers 10 and 12 may be made of a white polyvinyl chloride (therefore appearing white in reflected light).

In respect to claims 4, Scantlin discloses that the identifiers occur through transparencies in the metal layer (holes) which are punched through the core sheet 8 (Col. 3, 35-37). Regardless, although product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985)

In respect to claim 6, Scantlin doesn't disclose that the coating layers do not exhibit an appreciable absorption of laser radiation however features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. Again, this limitation depends largely on the amount of radiation used, and what one considers to be "appreciable absorption".

In respect to claims 7 and 8, Scantlin discloses that the identifiers (holes) 6 convey coded information (Col. 5, 55-56), which can be construed to personal data, data relating to the data carrier, *or the like.*

In respect to claim 9, Scantlin discloses a "screened form" of identifiers 6 embodied as dots (Fig. 1).

. In respect to claim 10, Scantlin discloses the metal layer 8 is imprinted on one of the coating layers 10 and 12 (Fig. 2).

In respect to claim 11, Scantlin does not disclose that the metal layer is vapor deposited however although product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985)

In respect to claim 12, Scantlin discloses that the coating layers 10 and 12 are provided with protective layers 14 and 16 which are transparent (see Fig. 2).

In respect to claims 13 and 14, Scantlin discloses the security element embodied on the interior of an identification card (Fig. 1).

In respect to claims 15, Scantlin discloses additional indicia 4, protected underneath the protective layer 14 and therefore may be employed as a further security feature.

Claims 1-4 and 6-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scantlin (US 3,802,101).

In respect to claim 1 and 2, Scantlin discloses a security elements comprising: a core sheet 8 (which may constitute a metal layer e.g. aluminum; Col. 7, 8-14), which therein is introduced identifiers 6 in the form of patterns; the metal layer 8 is disposed between translucent coating layers 10 and 12 having "sufficiently low transmissivity to obscure the coded regions [6] of the core sheet 8 from view by the naked eye" (Col. 5, 66-67). Although Scantlin does not disclose a "watermark effect" while features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997). (MPEP 2114). The structure disclosed in Scantlin will perform this effect (see Abstract) (i.e. the "coded region" identifiers transmit more light than its surroundings causing a "positive" image, and upon reflection, reflect less than their surroundings).

Scantlin does not explicitly disclose that the coating layers 10 and 12 have a visible spectral range (synonymous with transmissivity of visible light) of less than 10%,

or more specifically, less than 5%, however the claim would have been obvious because a person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary common sense. Scantlin discloses that the coded regions (holes) have a higher transmissivity than the surrounding core sheet regions, such that "as radiant energy impinges upon the core sheet 8, it passes through the holes 6 to convey coded information but does not pass through core sheet 8" (Col. 5, 53-55); thus it can be inferred that, at a given frequency or intensity, the holes 6 have a given transmissivity while the surrounding region of core sheet 8 has zero transmissivity. Scantlin further discloses that the coating layers 10 and 12 have a transmissivity higher than the portion of the core sheet 8 having the lowest transmissivity (in this case zero, for the surrounding region of the core sheet); it can be further inferred, then, that the coating layers 10 and 12 have a transmissivity greater than zero, yet, it is desired that the transmissivity is "sufficiently low transmissivity to obscure the coded regions [6] of the core sheet 8 from view by the naked eye" (Col. 5, 66-67). Because the transmissivity is positive and allows some light as discussed above, the transmittance is *sufficient* for viewing the metal layer and identifiers in reflected light (i.e. the transmittance does not impede the difference in reflection between the coded hole regions and the core region).

By the applicant's own admission "the present invention depends precisely on the fact that the foils [coating layers] are not completely nontransparent, but rather admit a certain, if small, portion of the light when illuminated from the back of the card" (Spec,

Pg 6). Scantlin discloses this: coating layers which are not completely nontransparent (having a transmissivity greater than zero) and therefore admitting a small portion of light. Routine experimentation, such as changing the thicknesses of the coating layers (and thus their transmissivity) would result in numerical transmissivities less than 5%, which one or ordinary skill would find to be sufficiently low to obscure underlying indicia.

In respect to claim 3, Scantlin discloses that the coating layers 10 and 12 may be made of a white polyvinyl chloride (therefore appearing white in reflected light).

In respect to claims 4, Scantlin discloses that the identifiers occur through transparencies in the metal layer (holes) which are punched through the core sheet 8 (Col. 3, 35-37). Regardless, although product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985)

In respect to claim 6, Scantlin doesn't disclose that the coating layers do not exhibit an appreciable absorption of laser radiation however features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. Again, this limitation depends largely on the amount of radiation used, and what one considers to be "appreciable absorption".

In respect to claims 7 and 8, Scantlin discloses that the identifiers (holes) 6 convey coded information (Col. 5, 55-56), which can be construed to personal data, data relating to the data carrier, *or the like*.

In respect to claim 9, Scantlin discloses a "screened form" of identifiers 6 embodied as dots (Fig. 1).

In respect to claim 10, Scantlin discloses the metal layer 8 is imprinted on one of the coating layers 10 and 12 (Fig. 2).

In respect to claim 11, Scantlin does not disclose that the metal layer is vapor deposited however although product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985)

In respect to claim 12, Scantlin discloses that the coating layers 10 and 12 are provided with protective layers 14 and 16 which are transparent (see Fig. 2).

In respect to claims 13 and 14, Scantlin discloses the security element embodied on the interior of an identification card (Fig. 1).

. In respect to claims 15, Scantlin discloses additional indicia 4, protected underneath the protective layer 14 and therefore may be employed as a further security feature.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Scantlin (US 3,802,101) in view of Hurier (US 5,651,615). Scantlin does not disclose the additional indicia 4 featuring a luminescent substance however Hurier teaches using a luminescent ink for indicia 38 (Fig. 3) and it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the indicia taught in Scantlin with luminescent ink in view of Hurier to provide high forgery-proofness through excitation under ultraviolet light (0043).

(10) Response to Argument

In respect to claims 1-4, 6-15, and 19, the applicant contends that Scantlin does not anticipate all of the limitations in the claims.

The examiner respectfully disagrees. The elements at issue are functional limitations of the structure, namely, the "watermark effect" and the coating layers having a visible spectral range of less than 10% or more specifically 5%. In both cases the examiner believes that the structure disclosed in Scantlin is structurally capable of the functionalities.

In respect to providing a "watermark effect" the purpose of Scantlin is to allow transmitted light through the coded regions (Abstract). Thus, the coating layers Scantlin cannot be opaque to visible light i.e. they allow at least enough transmission to differentiate between the coded and non-coded regions (seen through the coating layer). This means that the transmission through the coating is atleast a value over zero. Furthermore, the fact that the transmission obscures the underlying coding in

reflection making it "difficult to observe" (Col. 4, 43) thus Scantlin teaches a very low transmission e.g. under 5% (very opaque but not completely). Further evidence for this specific number can be found in the fact that both Scantlin and the present application teach identical layers, with identical properties, for the same application, a credit card. Although the thickness is not made explicit in Scantlin, credit cards are regulated to be the same thickness, around 30 mils. This provides further evidence that the structures are identical as claimed. Finally, the recitation of "visible spectral range of less than 10%" is a functional limitation that greatly depends on the light source used, wavelength or light, ambient light, reflection angle, etc. The applicant has failed to disclose a structural difference between Scantlin and the present invention (again, the 10% transmission is not construed to be a structural definition as it is dependent on several outside factors).

In respect to claims 1-4, 6-15, and 19, the applicant contends that Scantlin does not teach or suggest all of the limitations in the claims to one of ordinary skill.

The examiner respectfully disagrees. With all of the above discussion considered, if a transmission under 5% is not explicitly disclosed, it would have been obvious to one of ordinary skill in the art through routine experimentation. As discussed above, a value for the transmission over 0% is necessary for Scantlin to function (Abstract) and further, the coating makes the underlying coding "obscured...from the naked eye" and "difficult to observe" so that viewers are "probably not aware" of the coded regions. All of the above phrases strongly suggest a very low transmission. A

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transmission of between 0% and 5% would be an obvious transmission range to experiment with, one which would allow the coded transmission to function (above 0%) yet as low as possible to make the underlying coding difficult to observe.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Kyle Grabowski/

Examiner, Art Unit 3725

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/Dana Ross/

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